

AH

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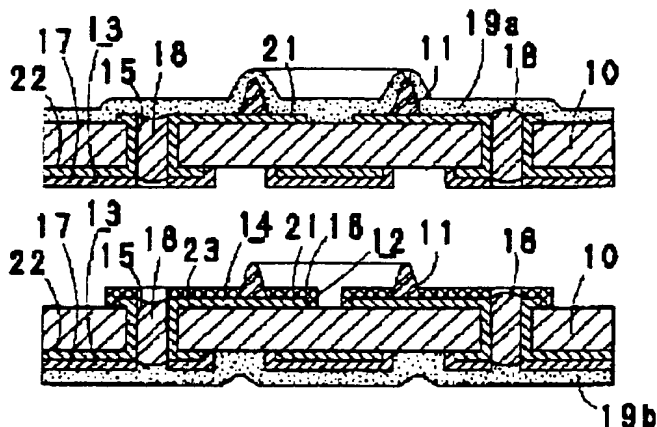
APPLICATION DATE : 23-05-97
APPLICATION NUMBER : 09134152

APPLICANT : MATSUSHITA ELECTRIC WORKS LTD;

INVENTOR : FURUICHI SHUICHI;

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TITLE : MANUFACTURE OF
SEMICONDUCTOR PACKAGE



ABSTRACT : PROBLEM TO BE SOLVED: To raise the reliability of the thermal cycle of a semiconductor package by a method, wherein a solid material is filled in cavities formed in the inside of a through hole plated film, a gold-plated layer is formed on the surface of a conductor used as one part of a contact circuit on the surface on one side of the surfaces of a substrate, and a gold-plated layer is formed on the surface of a conductor used as one part of a bonding circuit on the other surface of the substrate.

SOLUTION: A solid material 18 is filled in cavity parts formed in the inside of a through hole plated film 15, and the whole surface of a substrate 10 formed with a dam frame 11 is masked with a first resist film 19a. At this time, the whole surface is masked in such a way that a conductor 22 used as one part of a contact circuit is exposed. A gold-plated layer 17 is formed on the surface of the conductor 22 used as one part of this contact circuit to manufacture the contact circuit 13. The whole surface in the opposite side to the surface of the substrate 10 formed with the dam frame 11 is masked with a second resist film 19b. At this time, the entire surface is masked in such a way that a conductor 21 used as one part of a bonding circuit and the like are exposed. A gold-plated layer 16 is formed on the surface of this conductor 21, and the bonding circuit 12 is manufactured.

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